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Elements of Mental Training in Music

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Abstract

Mental training typically takes place without an instrument or the physical act of playing, and focuses on a particular activity, a conscious guiding of that activity, as well as on incorporating an emotional experience of that activity. Previous research (Immonen 2007) showed that both modes of practicing, mental as well as physical, involve three important elements: planning, realization, and evaluation of the practice. In music, mental training aims at the most ideally possible act of playing and the creation of a musical event. The research problem is to find out the pianist carries out the mental training. The research data was collected through the interviews of four highly talented pianists of the Sibelius Academy.

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Keywords: mental training; talented pianists; musical memory; interpretation; inner ear practicing; psyche of musician

1. Theoretical background

The purpose of this research is to focus on the elements of mental training and its connections on the level of an ideal musical performance. The concept of mental training is very holistic in nature including different personal strategies and ways of training.

The Musician's mental practice may be separated into several different aspects; firstly there is the visual starting point; secondly the motor-kinesthetic issues; and thirdly, there are aspects of the auditory senses (Zatorre and Halpern 2005). Mental practicing may also take place without the visualization of, for example, verbal training, and self-encouragement are also forms of mental training. Murphy and Martin (2002) define mental processes and mental training as non-physical training of performance and

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techniques. They also state that mental training is some kind of imitation of the sensory and perceptual experiences. For one thing it means, for example, "knowledge of movement." The individual must also be aware of the experience and create images intentionally. Mental images can be created without any specific external stimulus. Murphy and Jowdy (1992) emphasize the awareness of the difference between imagination and day-dreaming. Mental training is also the capacity to use one's imagination as a tool in practice processes (Hardy et al. 1996, 28).

Mental training more over is not limited only to extreme situations (such as contests and concert presentations), but it can be used to achieve the best results also in normal training situations. Through mental training it is possible to learn better technique and concentration. These are all important elements engaged in training and they also give the best motivation for practicing. Development of physical skills through mental training is strongly related to a better performance and strengthened self-confidence (Liggett 2000, 20).

Imagining, and the mental work involved, includes much more than only images. Imagining is a thinking process involving many of the senses such as sight, hearing, smell, and taste. Mental training can be seen as a communication mechanism between perceptions, the body and changes in the sense of the body or touch. Mental training has been used in improving presentation skills, awareness of the body and shape, and slimming. Even the idea of shaping the immunizations of the cells through mental training has been developed (Esplen and Hodnett 1999).

The characteristics of mental training feature a very holistic dimension. The principle is that every individual imagines him/herself as ideal as they can in the circumstances of their ideal situation or presentation. Mental training is a goal-oriented training procedure where the most important aspect is not only the improvement in the physical or technical issues, but also in the ability to control them mentally. The objects of mental training can be technical issues, movements, automation, the ability to imagine situations, widening of the limits of physical performance, and raising one's self-confidence (Immonen 2007).

In this article the concept of mental training is used in the sense of systematic practicing which takes place in the inner mind in the absence of any concrete instrument or real performance situation. Mental training is directly connected to musical action and its cognitive inner guiding and emotional experiencing. In this article the mental training of musicians is integrally related to playing and performing music.

2. Study design and results

The research problem is to discover how the pianist carries out the mental training. The research data has been collected through the interviews of four highly talented pianists of the Sibelius Academy. The qualitative research method of thematic interviews is the content analysis.

According to the interviews of the highly talented pianists, the following elements were found to be effective regarding the training in music. These elements include visualization, the auditory sense and the concept of an internal ear, musical memory, technical issues, interpretation and, finally the musician's psyche. The following sections explicate each of these elements in turn.

2.1. Visualization

The Music visualization exercise is a good way to discover how well one is able to manage her/his performance. The complete information of a notation is needed. The way of visual images is connected over the effectiveness of the mental exercise of the musician. The claim here is that the internal images are more effective than external images. By internal images, it means that musicians have images in

which he/she is inside him/herself and, in external images in which he/she has external impressions from outside him-/herself, such as like looking at a video of his/her own performance (Cox 2002, 75-79). The internal imagery appears to be more effective than the external images. The internal mental images seem to be related to the kinesthetic knowledge of the individual (Callow & Hardy 2004).

Lazarus (1984, 4-5, 30) argues that even closing the eyes to relax is enough to start the mechanism of mental images. In this sense, images are described as the Mind's Eye (Kalakoski 2006, 26). Because the ability to imagine and make mental images differs from person to person, it is obvious that some musicians can practice mental imagery more easily than others. Stated most plainly, therefore, those who can train mentally can prepare better for the challenging situations.

Optical-based visualization contains many different elements. According to the interviews of this research, pausing in certain situations of mental imagery comprises more than just visual experience alone but contains many different aspects at the same time. "At the same time it can be kinesthetic, visual, naturally with auditory sense, or it can be connected to the shape of a keyboard." This visual image means not only seeing the notation but seeing the shape and topography of the keyboard at the same time. So it is possible to see the notation in the background, and at the same time to see a keyboard more clearly.

The visual images were natural for all interviewees, who reported that visual images of the score and notation were almost always possible. One interviewee described that "the most important parts of the music, such as the beginning of the development section, were easier to visualize than, for example starting to play in the middle of the phrase." For one of the interviewees it was easier to see the third bar of the right page for example than to have the visual image of the whole section. The visual images were not seen as a very important form of mental training for the interviewees, although for some of them it was an important tool for memorizing the notation. The visualization was more important in the beginning and during the studies than later in their career. "The sense of sight is too highly valued", said one of the interviewees: "'is there any reason to process music with the visual senses, when the music itself is not at all visual material and some highly talented musicians being unable to see because they are blind."

For all interviewees the first bar is the most important. "The first phrase gives the image of the following phrase and so on...", but" it is much more difficult to have the visual image of the middle of the second page, for having that you need different kinds of techniques, like numbers with the phrases and bar sections." One practical tool that was mentioned for visual mental training was to play one bar and visualize the second and so on. Most of the interviewees didn't want to see visual images of the music. Visualization was a tool for practicing but most of interviewees thought that the further away from a visual notation you can go, the closer you are to the idea of music" (Immonen 2007).

2.2. Auditory sense and the concept of an internal ear

To be able to create an auditory image presumes the skill to preserve an auditory image of the printed note. For example, when the composer or the musician has an image of the "dark voice", that is imagination. They have a nonverbal conception, an auditory image of the voice. Being a real Musician means "the Art of the imagination" (Cook 1990, 80-91).

The musical imagination is one of the most important sides of Musicianship. The "inner ear", "the inner hearing" is the real thing that the musician has to develop continually. The cognitive structures of the inner ear develop through listening and with constant practice. The inner hearing is the mind's ability to perceive, to remember, to compare and connect the tonal and rhythmic shapes even though it is not possible for the musician to hear the music concretely (Holahan et al. 2000; Elliott 1995, 227-228). Just as the (finally) deaf of Beethoven when he was unable to 'hear' with his physical ears the music he created happened with his musical imagination

The concept of an “Inner ear” is complicated and more varied than one might think. The information with the interviewees is “unconditionally never only an ear and hearing”. The inner ear seems always to consist of “the parameters in having the control”. On the other hand; simple as this; “Inner ear is the capacity to imagine in one’s mind how the peace of music sounds, how you can hear it”. (Immonen 2007)

An inner ear means “to be connected to the melody, but it’s not hearing the melody as an outsider, it’s inside you. You could describe that as starting to be the melody itself”. For the performer, naturally, it is important to hear as an outsider how the listeners are hearing the performance. But, for example, within the technical difficulties there can be the matter more of the inaccuracy of the inner hearing or something else, like the lack of some senses than the complete lack all technical ability, even with the professionals (Immonen 2007).

The resonance of the music and the musician is essential. “Your own playing, all you are producing needs to keep grounded within the notes. There must be the resonance in you”. That is; the music has to “kind of ring inside you so that you can play it out of yourself. That means that my own playing would definitely be like my inner ear which first hears everything in me and after that I’m playing it out. Only after that can I compare my playing to how I imagine it, how I hear it with my inner ear. If I cannot hear, that is then music that I cannot shape. If it is not almost at once a wakening anything in me, so how could I learn it since I don’t get it. “The inner ear is really a big, big thing. It means so incredibly many things.” (Immonen, 2007).

“The tradition is inevitably connected with all (that is in the mind of a musician), because the basis for the existence of performing music is to develop one’s own inner ear, thinking about the performing in an expressly physical, resounding reality. The musical piece of work has no inner ear of its own but it always has to be the performer’s inner ear, no matter if it is a question of the Viennese classical or a completely modern peace of music. The inner ear will be developed in the state where the musician identifies her-/himself”. The inner ear thus seems to mean that “the musician has to have some kind of an analogue to the music one is playing, the personal inner resonance to the music in question.” (Immonen, 2007).

2.3. Musical memory

The most used object with mental training seems to be reciting from memory. “Yes, very much like reading the material learned by heart, memory means that you kind of “attack” at the material on a physical level, on the level of muscle memory and in the mind’s memory and, how would you call it, on the level of an abstract memory.”

The interviewee describes the analytic learning by heart: “I now emphasize that mental training to me means primarily analytic learning by heart; that there you have a chord etc. And that means to strengthen learning by heart. That is primarily how I’m doing mental training.”

To keep up in one’s memory the material more effectively means that, more than other things: “Besides, it means that you can trust something, the automations of various kinds and that you, already by practicing, and for example through your visual memory, you take some n things into your memory that you then remember as being totally separated from your instrument.”

One interviewee has suggested that, to keep the material in memory in principle and in practice, would be to maintain systematic habits. As a system there could be a “kind of a mantra” when, for example, in the morning’s exercise program would be to work with one special composition at a time. That would be like making sure to keep everything in mind. The composition, learned earlier “might later on be easier to dig out, because you have known it well already once.” (Immonen, 2007).

2.4. Technical issues

The automaticity of playing has been clearly connected clearly with the learning of a motor skill, but the conception has also been applied to the cognitive areas as well. The automatic performance is usually fast and presumes the relatively low level of conscious control. “Without thinking” means that the conscious active memory is not essential for such a performance. (Cooper & Sweller 1987; Sweller & Chandler 1994; Sweller et al. 1998.)

One point to be made concerning the musician’s technique is the “Feeling sense.” It is like a prejudged knowing, or the kinetic sensory perception. It is not a question of kinaesthesia or of motor memory. The feeling sense is continually, slightly some time ahead the moving fingers. It is indeed a question of something that exists within the musician her-/himself. It is more like sensory perception than a thought. If the “feeling sense” is there, either before playing or while playing, the muscles needed are primed to the performance. (Ristad 1982, 119–121).

The definition of the technique seems to be either very easy or difficult for the Musician to articulate; “The techniques in playing? Well, that means that you can do you want to. To strengthen the memory with mental training is also technique”; another of fers: “Technique? It’s impossible to define... It contains thousands of things.”

2.5. Interpretation

When the musician tries to understand music, he/she simultaneously tries to interpret the music. The mental training seems to be suitable for the interpretation. One of the interviewee describes; “In my case the interpretative mental training is to read the notes analytically and yes, at the time I’m paying attention to the aspects of interpretation. I’m for example thinking about the tempo relationships. For example I’m testing and rectifying if there is “meno mosso” or not in one of the themes. Also I’m trying in my mind different pulse things, but maybe more seldom I’m playing the piece in my mind with notes.”

2.6. The Psyche of the musician

One very important objective for using mental training is to take care of the musicians psyche. To provide relief for state fright seems to be of uttermost importance. There are researches that show the manner in which mental training helps to prove self-esteem, the motivation, and trust in general (Abma et al. 2002; Callow & Hardy 1997; Cumming et al. 2002).

Mental training can help to concentrate on the performance situation that most often causes the nervousness and the lack of being concentrated (Morris et al. 2005, 223.)

When he/she is using mental training to increase self-esteem the best way is to imagine the correct performance. When the individual can imagine him-/herself enacting with the “perfect” performance, he/she starts little by little to believe of being capable of succeeding in a real situation (Weinberg & Gould 2003).

The results of the interviews showed that all the main elements of mental training are present in the data and they were combined with the senses, musical memory, technical issues, interpretation, and the psyche of the musician. The data shows that the purpose of these elements is to produce the ideal musical performances.

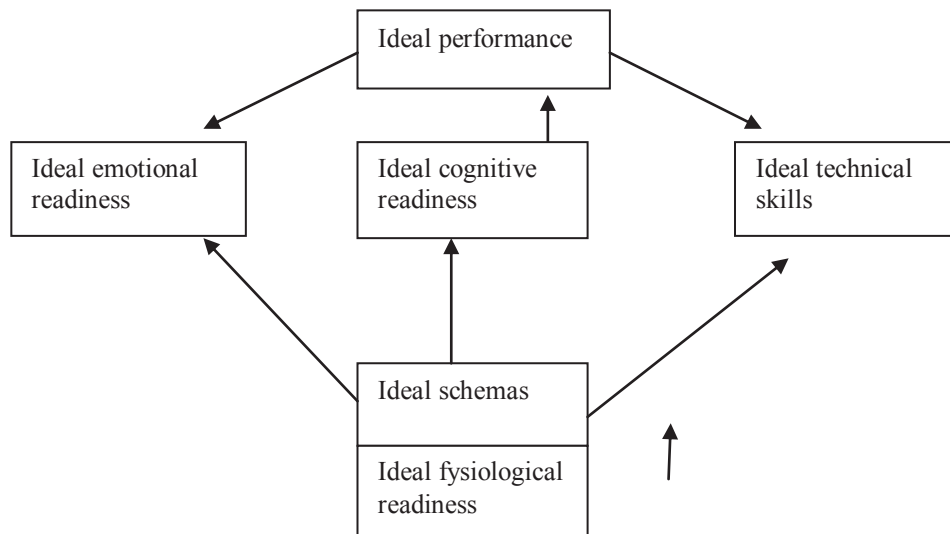


Fig. 1. The elements of an ideal musical performances

When talking about mental training, the best possible final outcome, in a way “without even the possibility of a mistake.” Another interviewee’s description suggests that the only possibility is really to think only of ideal performances. One should not even think about mistakes at all; rather, but what this now really “this means every single side in playing is totally ideal, totally perfect and totally crystal clear and pure.”

Another musician is observing his own limits and readiness by focusing on the best situation and performance and an ideal performance by mental training. “Actually I have no other possibility. I feel unable to cope on a stage without trying to reach the ideal performance. Otherwise I couldn’t perform anything. That means that it must, it must be an ideal image. In a way you have to be the best possible to be able to perform anything at all. So, the image simply must be ideal.” Another interviewee suggests; “certain points, some critical points, some moments” are good to be mentally in mind (Immonen 2007).

3. Conclusions

The qualitative research method of thematic interviews constitutes the content analysis. The interviews indicated that while doing mental training, musicians differ in the use of their senses. Without a musical “inner ear” true musicianship cannot exist. The main elements of mental training were combined with the senses, musical memory, technical issues and interpretation, and the psyche of the musician. As a summary it is correct to note that for a musician the most important way to practice is by physical practicing. Mental training can, however, be very helpful by creating auditory and motor images to improve the concrete performance. Mental Training may also produce the effect of keeping the music in mind as well on the important technical issues in playing, such as exactness and co-ordination, the automaticity of playing, and concentration. Mental training is most effective while it is a question of the musician’s psyche.

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